THE
TRAINING SCHOOL BULLETIN

FEBRUARY 1920

Very Bright and Feeble Minded Children
The Study of Qualitative Differences

By Carroll T. Jones

PART III

(Continued from the January issue)

SUMMARY OF EXAMINATION RESULTS

In the concluding portion of this study the results of the various tests and examinations are summarized and contrasted. The tables giving the individual scores and measurements have been omitted on acount of lack of space, but are included in the complete paper.

Pedagogical Tests: The Arithmetic Scores (Courtis, Test Series A) show the members of the feeble-minded group to be more proficient than the others in number of examples done. The very bright children work more slowly and also more accurately. It is also probable that with the feeble-minded children the processes involved have, by dint of constant drill, become automatic, while with the very bright children, they still require rational thinking.

In the so-called "Reasoning Test" there is less difference in the two groups, showing that in spite of the great difference in years of training, the very bright boys are as proficient in this kind of work as the older boys.

In the Spelling Tests (Ayres) the feeble-minded boys have higher scores. The same is true in the Handwriting Tests (Starch), the bright boys being inferior to the others both in speed and quality of the writing.

In the Reading Tests the younger subjects gained higher scores. In the Silent Reading Tests (Courtis) they stand consistently higher in their ability to get the sense of a passage read. The Oral Reading Test (Gray) shows that they read as rapidly as the feeble-minded boys and make fewer mistakes.

In short, it may be stated that in school tests, the feeble-minded children stand higher where success depends upon mechanical acts,

which have been automatized, but that they fall below the very bright children in all work requiring rational thinking.

Anthropometric Measurements: The cranial measurements taken individually do not give evidence of any general tendency in either the bright or the feeble-minded group. However, when the cranial capacities were calculated by means of Lee's formula and compared with the Berry-Porteus percentile tables, it was found that none of the children of the bright group fell in the extreme percentiles. Of the feeble-minded group one, however, fell below the normal ten percentile, one below the zero percentile, and one above the one-hundred percentile. In other words three of the four feeble-minded children measured had cranial capacities quite outside the normal range of variation, one of them being markedly hydrocephalic.

The other physical measurements showed the usual variations, due to difference of life age between the two groups. Regarding the relation between standing and sitting height, there was no great difference in type of form observable. The chest measurements were all noticeably below both the sitting height and one-half the total stature in all except one case, that of the oldest boy of the feeble-minded group, who was decidedly of the brachyscelous type. How far other factors besides life age have affected physical differences of the two groups is impossible to say. The fact that the average index of stature for the feeble-minded group is low for children of this age, agrees with Doll's findings, namely, that the sitting height of feeble-minded children is proportionately less than the standing height.

Differences in physical development between boys of the same mental but different life ages should be taken into account in devising a course of study for the two groups. If the children of the same mental age are grouped together, then some account should be taken of the difference in size of the children when the course of study is planned. For instance, to give these two groups of boys the same kind of work in manual training would be the rankest injustice to both.

Medical Examination: There are no striking differences brought out by the medical examinations. Two of the subjects, one in each group, are mouth breathers and have adenoids, and these two also have discharges from the outer ear. There are no cases of serious eye trouble. The teeth of the younger group are not so good as those of the older group, this probably being an age difference. The remaining portion of the medical examination revealed

no marked defects in either group. The average chest expansion of the bright group is 2.5 inches, and of the feeble-minded group 2.6 inches. The relative difference in chest expansion is only slightly more significant, 10.8 per cent. for the bright and 9.9 per cent. for the feeble-minded.

The only defects noted under neurological examination were slight impediments in speech and subnormal Achilles and knee jerks. There are no indications in any case of a pathological condition.

Psychological Tests: The results of the psychological examination have been given for convenience in groups, as follows:

1. *Sensory:* In three of the five tests of this set there is no noticeable difference in the scores of the two groups of children. No cases of color-blindness were found. In the tests of discrimination of lifted weights and of discrimination of length (Abelson), there are also no great differences. In the harder test of discrimination of length (Binet), however, the members of the very bright group are slightly superior. The feeble-minded group were found to be slightly more sensitive by the test to discover the esthesiometric index. The average of the upper and the lower limen for the two groups is practically the same, but the members of the very bright group have a greater range of uncertainty, that is, the upper limen is higher and the lower limen lower than in the other group. This does not agree with Czermak's conclusion as stated by Whipple, that sensitivity decreases with life age. It does agree, however, with the opinion of Burt that sensitivity is dependent on the cultural status of the subjects. Burt claimed that there was an inverse correlation between tactile discrimination and cultural development.

In view of the results of these tests, the conclusion follows that there are no marked differences between the two groups in the ability to make fine sensory discriminations for the particular senses tested. Whether or not this would hold true for the other senses is still to be determined.

2. *Motor:* All of the tests involving the ability to perform motor acts show the great superiority of the feeble-minded group, both in speed and accuracy. This agrees with Terman's conclusion that "stupid" boys are superior to "bright" boys in motor tests. In the two Tapping Tests, the Steadiness Test, and the Aiming Test, the feeble-minded children excel. The Crossing Dots Test was used by Abelson as a test of one form of quickness of perception. The task before the child is to follow along a row of sets of dots, to

recognize the sets of four dots, and to quickly make a mark through this set. For children of a mentality of ten, there would be no great difficulty in recognizing the sets of four dots. The task, then, resolves itself into one of co-ordination of hand and eye. In tasks of this sort the older boys excel. The fact that the feeble-minded do better than the very bright boys can be explained on the assumption that this is for these subjects a test of motor co-ordination of hand and eye. This difference is so great that it should be of significance, in case pedagogical practices are to be prescribed on the basis of the abilities of the two groups.

The feeble-minded children can undoubtedly do heavier and more complicated handwork than the other children. This means not only that much more can be expected of them in this kind of work, but also that they are trainable along this line, while, as is shown by pedagogical tests, they have already received as much formal academic training as their low mentality warrants.

3. *Attention and Immediate Memory:* The four tests grouped under the above heading, namely, the Knox Cube, the Geometric Figures, the Memory for Digits, and the Memory for Names of Objects, are tests in which the bright children excel.

The Knox Cube and the Geometric Figures tests also involve the ability to carry out directions, but the acts are so simple that the tests resolve themselves into tests of attention and immediate memory. They are, as tests of memory, dependent upon the ideational types of the subjects. This opens up a field fertile with suggestions for a further study, in which the problem of immediate memory as affected by ideational type might be investigated.

The few tests given here point to the tentative conclusion that, regardless of the type of imagery of the subjects, the bright are superior to the feeble-minded children in attention as measured by the Geometric Figures Test, the Knox Cube, and the two tests for immediate memory.

This does not agree with the conclusion of Johnson, that normal and feeble-minded children do not differ as widely in memory as in general intelligence.

4. *Description and Report:* In the description of an Object Test, the feeble-minded boys wrote much longer descriptions and mentioned more details than did the very bright boys. In the Testimony experiment with the visual stimulus, the feeble-minded subjects gave a much fuller report. This might be partially accounted for

on the basis of a certain facility in language, and in writing, which comes from so many years of school training. Since in the other Testimony experiment (auditory stimulus) there is very little difference in the number of points reported by the two groups, it is possible that the feeble-minded group contains more eye-minded subjects.

The results of the two memory tests with auditory stimulus would also seem to point to this same conclusion, namely, that the very bright are able to give a better report than the feeble-minded subjects when the stimulus is auditory. Whether or not this would be true with a greater number of subjects is still an open question.

5. *Suggestion:* The two Testimony experiments show the very bright children to be much more suggestible than the others. The Size-Weight Illusion and the Illusion of Warmth tests also indicate that the younger boys are more suggestible than the older. This extreme suggestibility of the younger children is in accord with the conclusions of Gilbert and other investigators, who have generally agreed that the force of suggestion increases with age up to nine years and decreases from then on to maturity. From the results, it would seem that suggestibility is dependent upon life age and experience and also upon the temperamental characteristics of the subject.

6. *Constructive Ability:* In the two tests of constructive ability, namely, the Stenquist Test and the Painted Cube Construction Test, the feeble-minded children are decidedly more proficient. This is probably to be accounted for, partly by their wider knowledge and experience in performing mechanical operations, and partly by their more highly developed powers of motor co-ordination. There is very little over-lapping, so that these tests are probably measures of life experience as well as of the specific mechanical abilities of the individual subjects within the separate groups.

7. *Association:* The results of the tests listed under the head of "Association" are in general in favor of the very bright group. The only test in which the feeble-minded do better than the others is Bonser's Controlled Association Test 111 B. a. This is probably due to the effect of school training, since in most of the sentences the correct association had already been formed by school training in language or geography.

The results of the Supra-ordinate Concept and the Mixed Relations or Analogies tests of Woodworth and Wells show no decided

differences between the two groups. All the other tests under this heading, namely, the Verb-object, the Hard and Easy Opposites, and the Substitution tests of Woodworth and Wells, and the Trabue Completion, result in scores in favor of the younger subjects. The superiority of these bright boys is particularly noticeable in the Substitution test and the Trabue Completion Scales. In all of the association tests which involve a critical choice of responses, the feeble-minded children are weak. They also show almost complete lack of critical evaluation of their reactions in the Trabue Completion Scales.

In general, the statement seems justified that the feeble-minded are as well able to make associations of some sort as the very bright children, but that they are very careless in the tests which require critical judgments regarding the accuracy of their work.

8. *Learning Test:* The only real learning test given was the Woodworth and Wells Substitution Test. As is stated under "Procedure," the subject was expected to fill in the last two rows of figures without looking at the key. The time taken for these two rows, and the number of errors, should be a criterion of the extent to which the numbers of the forms were learned. The very bright children made no errors, while the feeble-minded made twenty, and the time for the former group was much less than for the latter. The time for the first eight rows was much less for the feeble-minded group, and the number of errors much greater. This means that in this type of activity the very bright child proceeds more slowly and accurately at first, and that as a result he learns after a little practice to perform the task much more quickly and accurately than the feeble-minded child.

This does not agree with the results of Woodrow, who concluded that normal and feeble-minded children of the same intelligence level show the same ability to learn, that is, to profit by practice.

In view of these conflicting results, the matter of the learning capacity of feeble-minded and normal or very bright children of the same intelligence level becomes a fascinating problem for further investigation.

9. *Linguistic Invention:* As a test of linguistic invention, Whipple's Word-Building Test was given. The results show that the feeble-minded children attempt more words, but that their total number of correct words is less than that of the very bright children.

Here, again, the feeble-minded fail to scrutinize their own efforts from the standpoint of accuracy.

10. *Reasoning:* Of the three so-called reasoning tests given, two, Thurstone's Reasoning Test and Bonser's Literary Interpretation Test, proved too hard for all of the subjects, so that the results have no significance.

Bonser's Selective Judgment Test, while it was very difficult for all, did fall within the powers of three of the very bright children. None of the feeble-minded was able to hold the directing idea, while three of the very bright children succeeded in doing so, one of them gaining a score of 90.

11. *Apperception and Adaptation:* Under this head have been grouped certain tests which under varying conditions would measure different functions. Two of these tests, the Dissected Story of Gordon and the Hand Test by Thurstone are plainly too difficult for children of ten year mentality, and can be disregarded. The Heilbronner Tests, on the contrary, offered so little difficulty that they brought out no differences between the two groups.

In the Pictorial Completion Test the feeble-minded children did much better than the very bright. The very concrete situations presented to the feeble-minded children an opportunity to profit by their wider experience in life. This was also true in the Picture Story Arrangement Test (after Decroly) in which the feeble-minded made a much more sensible arrangement of the pictures and told a more connected story. The most obvious rationalization of the results of these two tests is that the life experiences of the feeble-minded children have helped them in these tests which involve real, concrete material.

The simple dissected picture of nine pieces was done more quickly by the very bright boys, and the more complicated picture of sixteen pieces more quickly by the feeble-minded boys. There is such a difference in the scores of the same subjects for these two tests, that it is probable that the increased difficulty of the second makes it an entirely different kind of test. The qualitative notes on the method of attacking the task do not throw any light on the problem. A series of pictures graded in difficulty would have to be experimented with, before any definite conclusion could be made regarding these tests.

In the Following Directions Test (easy) the feeble-minded subjects make fewer errors and do the test more quickly than the very

bright. These directions involve simple concrete acts, which are well within the mental grasp of the subjects. The Following Directions Test (hard) is relatively more difficult for the feeble-minded, since the very bright boys do as well on this test as the older boys. This agrees with the statement made above that the feeble-minded excel in tests which involve to any appreciable degree motor co-ordination, and that they fail in those which require critical choice of responses.

SUMMARY

The tests, as given in this study, do not settle definitely just what the psychological differences between very bright and feeble-minded children really are, but they do indicate along what lines future research work will be most likely to bring out striking differences. In other words, these tests should be considered as forming only a preliminary part of a more complete investigation, and as such, should serve the purpose of determining the best methods for conducting a real set of tests.

For the purpose of showing in what phases of consciousness the greatest differences between very bright and feeble-minded children *of the same mental age* will be found, the following comparisons between the two groups have been made:

(1) They do not differ appreciably in their ability to make sensory discriminations.

(2) The feeble-minded are far superior in tests of motor ability.

(3) In tests of attention and immediate memory the very bright boys surpass the others.

(4) In tests of description and report the feeble-minded excel, particularly when the stimulus is visual.

(5) In tests of suggestion the very bright are found to be more suggestible.

(6) The feeble-minded excel in tests of constructive ability.

(7) The members of the two groups form simple associations equally well, but the very bright show a more critical attitude toward their responses and, therefore, excel in the harder association tests.

(8) The very bright children show a tendency to learn very slowly at first, but to improve in both speed and accuracy in the latter part of the learning.

(9) The very bright children are more proficient than the feeble-minded in the tests of linguistic invention.

(10) The very bright excel in the reasoning tests.

(11) In the tests of apperception and adaptation, which involve concrete situations, the feeble-minded surpass the very bright children.

CONCLUSIONS

The conclusions suggested in the detailed discussion of the results are brought together here:

(1) Approximately four per cent. of the elementary school population are of very superior intelligence (Terman's criterion). These children may be selected without difficulty by means of teachers' judgments, if due account is taken of life age.

(2) Very bright and feeble-minded children of an intelligence level of ten years have practically the same mental age rating, whether tested by the Goddard or by the Stanford Revision of the Binet-Simon Scale. Feeble-minded children show a higher degree of scattering in the Stanford Revision.

(3) The family histories, home conditions, and neighborhood environments of the very bright children are far superior to those of the feeble-minded children.

(4) Feeble-minded children with difficulty pass beyond the school grade which corresponds to their mental age. The very bright children are accelerated in school progress and have little difficulty with their work in school.

(5) Feeble-minded children of a mental age of ten are better equipped with the mechanical "tools" of knowledge as shown by pedagogical tests, but in spite of their wider experience they are inferior to the very bright children of the same intellectual level in the application of these "tools" to the solution of practical "problems."

(6) Feeble-minded children are much larger and more mature than very bright children of the same mental age, this being due to the fact that they are chronologically older. They also vary in body proportions, but the significance of these variations has not yet been discovered.

(7) There are evident no differences in the physical conditions of feeble-minded and very bright boys sufficient to account for the difference in mentality.

(8) Feeble-minded and very bright boys having an intelligence level of ten years do not differ appreciably in powers of sensory discrimination.

(9) Feeble-minded boys are superior to very bright boys of the same mental age in motor ability, in ability to describe and report on objects seen, in constructive ability, and in powers of adaptation when concrete situations are involved.

(10) Very bright boys surpass feeble-minded boys of the same intelligence level in situations involving attention and immediate memory. They also show greater ability to learn or to profit by experience, to make difficult or involved associations and to reason.

(11) Very bright children take a more critical attitude toward their conduct in difficult situations.

(12) Very bright children are more suggestible than feeble-minded children of the same mental age.

SUGGESTIONS FOR PEDAGOGICAL EXPERIMENTATION

Interesting as such an investigation as this is from the purely scientific standpoint, nevertheless, it should, if possible, contribute in a practical way to the treatment of feeble-minded and very bright children.

If the pedagogy of the very bright child is to differ from that of the feeble-minded child of the same mental age, the variations in method should be based on the differences in the intelligence of the two. Nevertheless, since a "psychological possibility is not a pedagogical necessity," it is dangerous to attempt to prescribe pedagogical practices on the basis of psychological considerations. There must be an intervening step between known psychological facts and pedagogical practices. The necessity for this step has resulted in the pedagogical experiment.

In view of the above principle, it has seemed to be unwise to recommend definite treatment for feeble-minded and very bright children based on the results of a preliminary investigation of this nature. It is, however, in order to mention some of the facts brought out in this study which should be considered in planning the education of very bright and feeble-minded boys. It should be understood that the following recommendations are not intended for acceptance in practical work, until they have been studied thoroughly by means of pedagogical experimentation.

The home conditions and neighborhood environment of these children make it very clear, that the duty of the school is to make up in any way possible for the lack of good influences on the lives of the feeble-minded children. If the feeble-minded child, coming as

he does from a very poor home and living in the worst of neighborhoods, is to have a fair chance to develop even to the extent warranted by his mentality, he must *live* in the school and not merely *study* there. The elaborate equipment which such a plan requires is not necessary for the education of the very bright child, since in his training the school has the co-operation of a good home and excellent neighborhood surroundings. The conclusion naturally follows that the two groups should not receive the same training.

The school can not, of course, make up to the child for his unfortunate heredity, but it can take into account his potentialities for development when planning his training. If the child is not to rise far above the level of his family he should be trained to meet the demands of that station in life, and not be given the same training as the child who is to live on an entirely different plane.

If the school histories of feeble-minded children show that their school life has been one of constant struggle and failure, then the demands which the school has made upon them have been unfair. This study has shown the feeble-minded boys to be far beyond the school grade which their intelligence level warrants. This means that they are still struggling with academic work which they can never use in real life, even if they do succeed in passing into the next higher grade. The feeble-minded child of Moron grade can succeed at something, and he should be given a chance to do that something as a preparation for his life work, humble though this must necessarily be. The study also shows that Morons are very well able to work with concrete material. They can undoubtedly be trained to do certain kinds of work well. Furthermore, with the proper affective attitude toward life, they are able to get on in the world without being a burden on society. If the school can, by giving them work which is within their limited powers, get them into the habit of succeeding; and if it can, by its varied influences, make sure that they have a healthy emotional attitude toward society as a whole, much will have been done toward solving the problem of the high-grade defective.

Very bright children show a lack of familiarity with the use of mechanical things, and with the facts which they need in order to do school work which their high mentality would fit them for. They need these facts, however, as a preparation for something higher, while the feeble-minded children need them for practical use. The subject matter and the methods must, accordingly, be changed to

meet the needs of the two groups.

The fact that the very bright children are more self-critical would lead to the suggestion that the feeble-minded children be constantly urged to be very careful in all their work, and to check their own work in as many ways as possible.

The extreme suggestibility of the bright boys should enable the teacher to avoid disciplinary problems by means of well-lodged suggestions, a thing which the presence of the older and less suggestible boys would tend to make impossible.

The general conclusion regarding the training of very bright and feeble-minded boys as determined by the results of this study is, that since the qualitative differences between the two types of children emphasize strongly the difference in potentially further development, the school should recognize this and adapt the training of its pupils to the position in life which their mentality will enable them to fill.

EDITOR'S NOTE:—Owing to lack of space the bibliography of .61 references used in the preparation of the original thesis has been omitted.—S. D. P.

Trainability of Defectives Classification Sheet

By S. D. Porteus

In considering applicants for admission to training institutions for defectives, or even in the proper classification of the children after admission, some system of weighting the various items of information furnished by parents is very desirable. Not all the information given is of equal importance in determining whether a given child is likely to respond to training, and thus be suitable for admission. Even in institutions where a psychologist is employed, it may not be possible or advisable to give a child a proper mental examination on entrance or when brought for admission. The child may be nervous and frightened, or disturbed by the presence of the parents. In the second place the mental examination will not always provide sufficient evidence to enable one to advise as to which group a child fits into when admitted. Consequently, a satisfactory system of classifying information gathered in advance of the child's entrance

may result in the exclusion of unsuitable cases or may save a great deal of time in proper grouping within the institution.

Both considerations are important. The admission of a case which is unsuitable, whether from the standpoint of too low or too high a mental level, may be fraught with serious consequences. In the case of the untrainable, low grade child, who requires only custodial care, parents are often bitterly disappointed to find that after a few months' trial, improvement through training is regarded as impossible. They so often place an unwise dependence upon what to them are signs of awakening intelligence. If there is no provision made in the institution for such cases, refusal may be less painful to the parents than dismissal. With regard to the case in which diagnosis is doubtful, because of a high mental level, the admission of such children means that the institution is burdened by the presence of a sprinkling of the psychopathic, the delinquent, and the merely dull and backward. The advisability of the segregation of the first two classes from amongst the ordinary feeble-minded is very obvious. Such children are a constant disturbance and anxiety, and more thought and attention in supervision goes to twenty of these cases than to probably any hundred of the ordinary feeble-minded put together. One truly psychopathic or delinquent case may quite conceivably detract somewhat from the efficiency and happiness of every officer and every child in the institution. Admitting that such cases demand segregation and control for their own good or for the protection of others, there is just as much reason for guarding the ordinary feeble-minded from association with these cases as there is to protect normal society. Indeed, it may be more justifiable, for the normals have presumably greater power of resistance to evil influence than the more imitative feeble-minded. Hence the necessity to look carefully in admission blanks for danger signals, indicating the presence of these conditions.

With regard to the merely dull and backward, the past confusion as to the mental limits (by tests) of normality has resulted in the segregation of some individuals who have just as much ability to get along outside an institution as many who are already self-supporting. In many cases of intellectual retardation there may be a fairly strong presumption of potential social inefficiency, especially when this retardation is associated with evident faults of disposition, but until we have sufficient confidence in our tests—a confidence adequately borne out by experience—we must allow to every individual, who

possesses ability within the normal range of variation, the right to make the attempt at social adjustment. If we had separate institutions of a "parental school" nature for borderline cases, then the problem would stand differently. But in my opinion a "strong presumption" of social inefficiency is not sufficient evidence to warrant admission to an institution for feeble-minded. Where the psychological examination in inconclusive, and the case is admitted for observation, dependence must often be placed on the reports of either inexperienced or too experienced officers. The person who has been very many years in an institution for feeble-minded, and has had no experience during that time with normal children, very often exhibits a tendency to regard as being characteristically feeble-minded many actions which are merely characteristically childish. In other words, an expert view is very often a very narrow view, and serious mistakes have been perpetuated by the "Ipse dixit" of an eminent specialist, when the opinion has not been backed up by facts. Paradoxical as it may seem, expert opinion without objective demonstration is most to be distrusted, because of the serious consequences attendant on error. Interesting examples of this are to be seen in the medical profession, where eminent practitioners see in every patient symptoms of the malady in the treatment of which they themselves are specialists. So it is with a too experienced attendant in a feeble-minded institution. Border-line cases have occasionally been kept for a longer observation period in an institution, more on account of refusal to settle down and live like feeble-minded children than for any other reason. This resistance to institutionalization has been cited as a convincing proof of feeble-mindedness, instead of the very reverse, for in many cases the naughtier the child the nearer normal he is. Occasionally such individuals have left the institution, have made good in society, and have even returned to discount entirely the dire prophecies of their social failure. To draw from clinical experience, the writer has been consulted in cases of bad boys occurring in perfectly good families—in one instance a clergyman's—where the shock to the sensibility of the family had been so great that they could only ascribe the misconduct to a mental deficiency or an incipient insanity, and the truly heart-broken parents have proceeded with quiet persistence in an effort to get the delinquent member housed in a feeble-minded institution. It is not unusual for a case of intellectual retardation occuring in an otherwise brilliant family to be regarded as a serious mental defect. In both cases a change of home environment is necessary, though not to that of a feeble-minded institution.

It is quite plain that the admission of an unsuitable case is a serious matter, both to the institution and to the child. After all the problem of mental defect is so great that we can only hope to deal with the most necessitous cases—necessitous, that is, from the standpoint of the possible advantage to the child through admission.

There is an urgent need for the provision of institutions for the near-delinquent or socially maladjusted group—a half-way house between the reform school and the institution for the feeble-minded. Inclusion of such cases in either of the latter institutions is of very doubtful advantage, either to the school or to the children. If, as a matter of expediency, the feeble-minded institution does accept the extremely low or extremely high grade cases, provision should still be made for as little contact as possible with the trainable feeble-minded. The dull and backward, especially when they have no parents to provide for their care, do occasionally find their way into institutions, but in such cases there should be some foresight displayed with regard to their future, and plans should be soon formulated for their social guidance and industrial placement in the outside world. In any case whether they are admitted or excluded, a system of weighting advance information may be of value.

In consultation with Superintendent C. E. Nash, we have drawn out the following scheme by which children proposed for admission may be tentatively classified as to suitability for training. Though this scheme only represents Vineland's standards, there may be some suggestions in it for other institutions. Whether this be true or not, parents of defective children could by rating them according to the chart discover for themselves the probability of their admission to a given institution. According to the scheme the children are divided into five classes, ranging from "A, very suitable for admission," to "E, impossible." As "A" and "B" consist of the suitable classes we are not now concerned with them. Under the divisions "C," "D," and "E," marks are given under the following headings: Age, Self-help, Abilities, Nervous Diseases, Habits and Temperament, Physical Conditions. For each entry that applies to the child under column "C," one mark is placed against his record; under "D," three marks, and under "E," five or ten marks. The sum of the child's marks determines in which class his ultimate rating places him. For example, the child scoring five marks is in Class "C," and is a doubtful admission; any child scoring seven marks is very doubtful; and any child scoring ten marks

is regarded as impossible for training and would not be accepted under any circumstances. A case thirty-one years of age gets three marks under "D." If he has not clean habits, requires assistance in dressing, and has an I.Q. under forty and is nervous and excitable, he gains four single marks under "C" for each unfavorable circumstance and his total rating is seven which puts him in Class "D." In another case with an I.Q. above eighty-five, a child who is over sixteen years of age gains six marks under "D" and one under "C." He is, therefore, classed under "D" and evidently belongs in an institution for delinquent and feeble-minded. A case over thirty years of age, who at one time reached the eighth grade in school and is recorded as being nervous and excitable, has seven marks against his record and is probably psychopathic. The classification sheet is given in full below, and samples may be obtained by application through the Extension Department of The Training School.

CLASSIFICATION SHEET

	A-1 Very Suitable	B-3 Suitable	C-5 Doubtful	D-7 V. Doubtful	E-10 Impossible
Age	Bet. 5 and 12 years	Over 12 yrs.	Over 16 yrs. Below 5 yrs.	Over 30 yrs. Below 3 yrs.	Over 40 yrs.
Help. Self			Wets bed or clothing occasionally. Requires assistance in dressing.	Soils clothing occasionally. Cannot dress himself.	No clean habit. Cannot feed himself.
Abilities.	Good industrial ability. Repeats 5 digits. School Grade above 4th.	Good home abilities. Fair industrial ability.	No home abilities. Above 6th Grade. Above 75 I. Q. Below 40 I. Q. or cannot repeat 3 digits.	Below 30 I. Q. Above 85 I. Q. Above 7th Grade.	
Nervous Diseases.			Nervous and excitable. Insanity or epilepsy in either parent.	Chorea.	Epilepsy. (Includes "petet mal.") Insanity.
Habits and Temperament.	Trustworthy and Dependable.	Easily managed. Even disposition.	Not easily managed. Abrupt changes in temperament.	Habit spasms. Sex habits. Pilfering.	
Physical Condition.			Severe deformities. Paralysis. Very deaf or very bad vision. No speech development.	Crippled—cannot walk. Serious organic disease.	
		Rating:	1	3	5

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BULLETIN

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EDITOR'S NOTE—The Bulletin is an experiment in cooperative journalism. Contributions are solicited from all who are interested in work for the defectives, and who have a statement, method to report, or an opinion (dissent by implication) to express. It is especially desired to draw them to various shades of opinion.

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